Amendments to the Claims:

Pursuant to 37 C.F.R. § 1.173(b)(2), this listing of claims shows all changes to the claims being made by this Amendment paper.

Listing of Claims:

1. (original patent claim - currently amended - first amendment) A liquid cooled heat sink for cooling a heat generating component in contact therewith, comprising:

a heat sink base member having an open ended channel formed [in one] below a substantially planar first surface thereof, said channel including a curved lower wall and a pair of [side walls] sidewalls, each sidewall having a first end continuous with said curved lower wall and a second end terminating at said surface, said sidewalls being tapered from said first ends to said second ends, the open end of the channel having a span less than a span across a lower portion of the channel; and

a fluid conduit constructed of a thermally conducting material and disposed in said channel, said fluid conduit being disposed in said channel and having an outer span greater than the span across the open end of the channel for maintaining said fluid conduit in said channel by a friction fit formed between said [side walls] sidewalls and said fluid conduit, said fluid conduit having a flattened upper surface which is substantially coplanar with said [one] first surface of said heat sink base member, said flattened upper surface of said fluid conduit and said first surface of said heat sink base member together being configured to receive the heat generating component, the heat generating component being disposed [in use] in direct contact with said [one] first surface of said heat sink base member and being in overlying abutting relation with said flattened surface, [for]

thereby establishing direct thermal contact between the heat generating component, said first surface of said heat sink base member and said flattened upper surface of said fluid conduit.

2. (original patent claim - not amended)

3. (original patent claim - currently amended - first amendment) A heat sink as claimed in claim 1, wherein said heat sink base member includes [channel] channels on two sides of said heat sink base member.

4. (original patent claim - not amended)

5. (original patent claim - not amended)

6. (original patent claim - not amended)

7. (original patent claim - not amended)

8. (original patent claim - currently amended - first amendment) A liquid cooled heat sink for cooling heat generating components, comprising:

a heat sink base member having channels formed [in] below at least [one] a substantially planar first surface thereof;

a fluid conduit disposed in said channels, said fluid conduit having a flattened upper surface which is substantially coplanar with the first surface of the heat sink base member having

the channels therein, wherein at least one of said channels includes a local deformation rising from a surface of said at least one channel and said fluid conduit includes a local deformation directed toward the inside of said fluid conduit, said local deformation in said at least one channel and said local deformation in said fluid conduit being disposed adjacent to one another, [and] wherein said local deformation in said at least one channel is a ridge extending transverse to the direction of said fluid conduit, and wherein said flattened upper surface of said fluid conduit is configured to be in direct contact with at least one of the heat generating components.

9. (original patent claim - currently amended - first amendment) A liquid cooled heat sink for cooling a heat generating component in contact therewith, comprising:

a heat sink base member having an open ended channel formed [in one] below a substantially planar first surface thereof, said channel including a curved lower wall and a pair of [side walls] sidewalls, with each sidewall having a first end continuous with said curved lower wall and a second end terminating at said surface, said sidewalls being tapered from said first ends to said second ends so that the open end of the channel has a span less than a span across a lower portion of the channel; and

a fluid conduit constructed of thermally conductive material and disposed in said [channels] channel, said fluid conduit having a flattened upper surface which is substantially coplanar with said [one] first surface of the heat sink base member and in direct contact with the heat generating component, wherein said channel includes a local deformation rising from a surface of said channel and said fluid conduit includes a deformation directed toward the inside of said fluid conduit, said local deformation in said channel and said local deformation in said fluid conduit being disposed adjacent to one another, and wherein said flattened upper surface of

said fluid conduit and said substantially planar first surface of said heat sink base member are configured to be in direct contact with the heat generating component.

10. (added by reissue - currently amended - fourth amendment) A heat sink for cooling a heat generating component in contact therewith, comprising:

a heat sink base member having an open ended channel formed below a substantially planar first surface thereof, said open ended channel including a curved lower wall and a pair of sidewalls, each sidewall having a first end continuous with said curved lower wall and a second end terminating at said first surface, said sidewalls being tapered inwardly from said first ends to said second ends, the second ends of said sidewalls having a span less than a span across a lower portion of said channel; and

a tubular fluid conduit constructed of a thermally conducting material and disposed in said channel, said fluid conduit having an exterior surface in opposing relationship with the curved lower wall and the sidewalls of the channel, and also having a flattened upper surface which is substantially coplanar with said first surface of said heat sink base member, said flattened upper surface of said tubular fluid conduit and said first surface of said heat sink base member together being configured to receive the heat generating component and thereby establish direct thermal contact between said flattened surface of said conduit, said first surface of said heat sink base member and said heat generating component.

11. (added by reissue - currently amended - first amendment) The heat sink according to claim 10, wherein an outer span of the portion of the fluid conduit disposed in said channel is greater than the span between said open end of said channel.

12. (added by reissue - not amended)

13. (added by reissue - currently amended - first amendment) The heat sink according to claim 12, wherein an outer span of both the portion of the fluid conduit disposed in said channel and the adhesive disposed in said channel is greater than the span between said second ends of said sidewalls of said channel.

14. (added by reissue - not amended)

15. (added by reissue - not amended)

16. (added by reissue - not amended)

17. - 32. (canceled)

SUPPORT FOR AMENDMENTS TO CLAIMS

1. The amendments made to claim 1 are supported by the illustration of the heat sink as shown in Fig. 11. The tube having a flat surface which is coplanar with the upper surface of the base member is described in the specification at col. 6, lines 41-43. Direct contact between the component and the conduit is described in the specification at col. 6, lines 44-46.

2. The amendment to claim 3 merely corrects an obvious typographical error, and so the support therefor is found in original claim 3.

3. The amendments made to claim 8 are supported by the illustration of the heat sink as shown in Fig. 11. The tube having a flat surface which is coplanar with the upper surface of the base member is described in the specification at col. 6, lines 41-43. Direct contact between the component and the conduit is described in the specification at col. 6, lines 44-46.

4. The Amendments made to claim 9 are supported by the illustration of the heat sink as shown in Fig. 11. The tube having a flat surface which is coplanar with the upper surface of the base member is described in the specification at col. 6, lines 41-43. Direct contact between the component and the conduit is described in the specification at col. 6, lines 44-46.

5. The Amendments made to claim 10 are supported by the illustration of the heat sink as shown in Fig. 11. The fact that the tube has a flat surface which is coplanar with the upper surface of the base member is described in the specification at col. 6, lines 41-43. Direct contact between the component and the conduit is described in the specification at col. 6, lines 44-46.

6. The Amendments made to claim 11 correct an antecedent basis problem noted by the Examiner, and are supported by the original claim 11 as filed.

7. The Amendments made to claim 13 correct an antecedent basis problem noted by the Examiner, and are supported by the original claim 13 as filed.